WHAT IS CLAIMED IS:

1. An explosive round countermeasure system comprising:

an array of charges placed in spaced relation to a structure to be protected;

means for sensing an incoming explosive round having a nose mounted fuse structure; and,

means for detonating at least one of the charges in the array responsive to the sensing means such that the detonation is timed for placement of the fuse structure adjacent the at least one charge.

2. A countermeasure system as defined in claim 1 wherein the array comprises a plurality of primacord lines;

means for holding the primacord lines in parallel spaced relation; and

means for holding the spaced primacord lines in spaced relation from the structure to be protected.

3. A countermeasure system as defined in claim 2 wherein the means for holding the primacord lines comprises a membrane with the primacord lines attached thereto in a parallel pattern.

4. A countermeasure system as defined in claim 3 wherein the means for holding the spaced primacord lines comprises an inflatable spacer bag sufficiently pliable to allow penetration of the nose of the explosive round without detonation and further comprising means for inflating the spacer bag.

5. A countermeasure system as defined in claim1 wherein the sensing means comprises a break screen substantially parallel to and proximate the array.

6. A countermeasure system as defined in claim 1 wherein the sensing means comprises a light screen.

7. A countermeasure system as defined in claim 1 wherein the array comprises a plurality of point charges and further comprises standoffs mounted to the structure to be protected in a spaced array holding the point charges.

8. A countermeasure system as defined in claim 7 wherein the standoffs are flexible and further comprising whiskers mounted on each point charge opposite the standoff whereby engagement of the whisker with explosive round deflects the point

charge and standoff to avoid direct impingement of the fuse of the round on the point charge.

9. A countermeasure system as defined in claim 1 further comprising a shock absorbing impact surface intermediate the array of charges and the structure to be protected.

10. A countermeasure system as defined in claim 9 wherein the impact surface provides sufficiently rapid deceleration to render a secondary fuse in the explosive round inactive.

11. A countermeasure system as defined in claim 1 wherein the array of charges are mounted on the surface of the structure to be protected and the means for detonating further comprises means for launching of at least one of the charges in a timed manner to space the charge from the structure to be protected for engagement of the fuse.

12. A countermeasure system as defined in claim 1 wherein the array comprises

a plurality of primacord lines;

standoffs for holding the primacord lines in parallel spaced relation and distal from the structure to be protected.

13. A countermeasure system as defined in claim 1 wherein the array comprises

a plurality of linear shaped charges;

standoffs for holding the linear shaped charges in parallel spaced relation and the spaced linear shaped charges distal from the structure to be protected, each shaped charge creating a substantially planar jet.

14. A countermeasure system as defined in claim 13 wherein the planar jet is created at an angle in front of the array.

15. A countermeasure system as defined in claim 7 wherein each point charge comprises a shaped charge providing a substantially planar jet.

16. A countermeasure system as defined in claim 4 wherein the sensing means comprises a break screen mounted to the spacer bag intermediate the primacord lines.

17. A countermeasure system as defined in claim 16 further comprising containment means for the spacer bag and mounted break screen and primacord array.

18. A countermeasure system as defined in claim 17 wherein the containment means includes an armored launchable cover for small arms fire protection of the spacer bag, mounted break screen and primacord array prior to inflation.

19. A countermeasure system as defined in claim 4 wherein the sensing means includes a radar for first sensing the incoming explosive round and means responsive to the radar for initiating the inflating means.

20. An explosive round countermeasure system comprising:

an airbag system having a plurality of erection columns inflatable within a ballistic penetration resistant envelope, the columns providing energy absorption capability for a soft catch of a Rocket Propelled Grenade (RPG), the airbag system mounted to a support structure proximate a protection area;

a gas generator for inflation of the erection columns upon receipt of an ignition signal;

a sensor system for detecting the motion of a projectile; and,

a processing and control system, operably connected to the sensor system and the gas generator, having means for assessing the detected projectile motion to confirm a profile consistent with a RPG and further having means for calculating a velocity vector of a confirmed RPG to predict impact on the protection area, said calculating means issuing the ignition signal upon a positive prediction.

21. An explosive round countermeasure system as defined in claim 20 wherein the plurality of erection columns comprise:

at least two rows of erection columns, the columns interconnected within each row, a front row connected to the envelope at the column at each end of the row and a back row connected to the envelope at the column at each end of the row.

22. An explosive round countermeasure system as defined in claim 20 wherein the airbag system further comprises:

a fabric conduit extending from the gas generator and connecting to the erection columns through an elbow.

23. An explosive round countermeasure system as defined in claim 20 further comprising a housing for storage of the erection columns and envelope prior to inflation.

24. An explosive round countermeasure system as defined in claim 22 wherein the erection columns comprise two sheets of fabric stitched at spaced intervals and the conduit and elbow comprise integral extension of the two sheets of fabric.

25. An explosive round countermeasure system comprising:

an airbag system having an erection column inflatable within a ballistic penetration resistant envelope mounted to a support structure proximate a protection area;

an active barrier sensing screen and detonation net erected by standoff means on a front surface of the pentration resistant envelope;

a gas generator for inflation of the erection columns upon receipt of an ignition signal;

a sensor system for detecting the motion of a projectile; and,

a processing and control system, operably connected to the sensor system and the gas generator, having means for assessing the detected projectile motion to confirm a profile consistent with a RPG and further having means for calculating a velocity vector of a confirmed RPG to predict impact on the protection area, said calculating means issuing the ignition signal upon a positive prediction.

26. An explosive round countermeasure system as defined in claim 25 wherein the active barrier sensing screen comprises:

means for detecting piercing of a sensing mesh by a nose of an RPG; and

means responsive to the detecting means for initiating the detonation net.

27. An explosive round countermeasure system as defined in claim 26 wherein the standoff means comprises an inflatable bag having sufficient pliability to be pierced by the nose of the RPG without initiating a fuse in the RPG.

28. An explosive round countermeasure system as defined in claim 4 wherein the spacer bag is inflated with a fire retardant gas.

29. An explosive round countermeasure system as defined claim 11, wherein the array of charges comprises:

a plurality of charges constrained in spaced relation by a flexible net and means for sensing penetration of the array by a nose portion of the explosive round, said sensing means igniting one or more of the charges in the array; and,

the launching means comprises a rifled barrel in which the flexible net is collapsibly contained and centripetal forces due to the rifled launch extend the net circumferentially.